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MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

October 12, 1987

TO: Virginia Loselle

FROM: Dave Monet
Hydrogeological Section
Environmental Response Division

SUBJECT: Ford Motor Company-Wixom Plant
Oakland County

Dave Monet

Thank you for sending the most recent laboratory results for the Ford Motor Company-Wixom Plant project. From a review of the results, it is apparent that there is contamination of both soils and groundwater in at least two areas on the property.

Soil contamination was found in the northwest corner of Site #2 (Refer to the attached drawing). The MDNR laboratory results show that low levels of cis-1,2 dichloroethene, and tetrachloroethene were found in soil collected from soil boring #14. The sampled soil came from the 1 to 2 feet depth interval, where a red cohesive loamy material was encountered. Unfortunately, this was the only soil boring conducted in the area, and therefore, the vertical and horizontal extent of the contamination cannot be determined without additional investigation.

If the vertical extent of this contamination is limited to the 1 to 2 feet depth interval, hand augering several holes in the area should be conducted to determine its lateral extent. If, from hand augering, it is apparent that the contaminated zone occupies a much thicker interval, other alternatives should be utilized. In either event, representative soil samples from the questionable soil zone and the adjacent upper and lower soil zones should be analyzed.

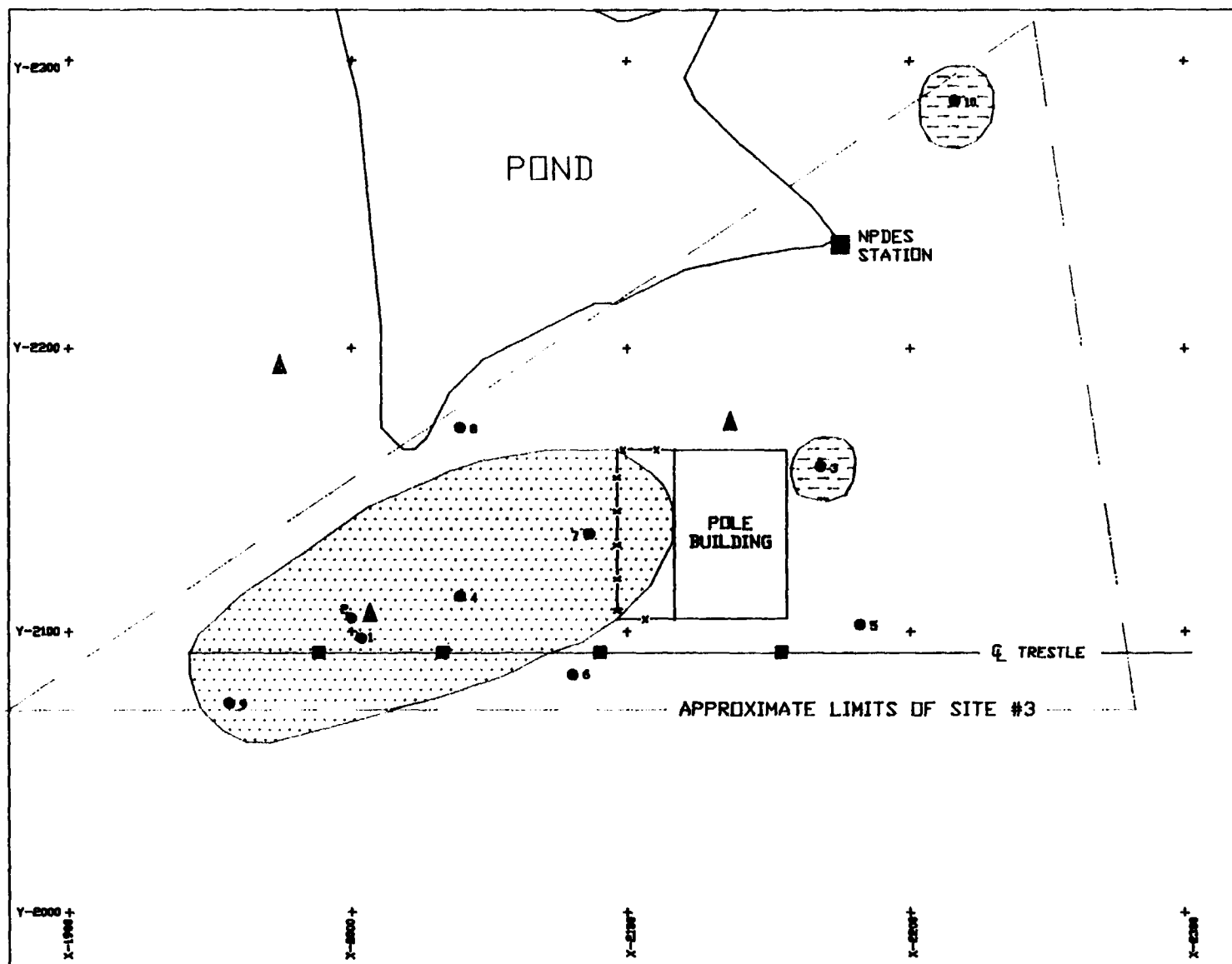
Both soil and groundwater contamination was found in Site #3 (See attached drawing). Soil borings # 1, 2, 4, 7, and 9 revealed sludges. Of these borings, #1, 4, 7, were sampled and found to contain benzene, toluene, ethylbenzene, xylenes, PCBs, and 1,1-dichloroethane. Soil borings #3 and #10 revealed foundry-type sands. A sample collected from soil boring #10 contained PCBs. Samples collected from soil boring #5 contained PCBs, and #6 contained benzene, toluene, ethylbenzene, and xylenes. It should be noted that the lateral and vertical extent of the foundry-type sands as found in soil borings #3 and 10 was not determined and may warrant additional investigation. In soil borings #1, 2, 3, 6, 9, and 10, saturated soils were encountered in zones ranging from a few inches to several feet in thickness. Of these borings, #1, 2, and 9 were located in the area where sludge materials were found. A water sample collected from #2 contained benzene, toluene, ethylbenzene, and xylenes.

Several monitoring wells should be installed in and adjacent to Site #3. Two wells should be located near soil boring #2. One well should be screened at the same depth where the previous water sample was collected to determine if contamination still exists. A second well should be screened in the first saturated zone below the sludge layer. This well should be double cased to prevent cross contamination of the saturated zones. A cluster of monitor wells should be located directly north and adjacent to the pole building. These wells should be screened in the first two saturated zones nearest the surface. The deeper well should be double cased. A final cluster of monitor wells should be located north of Site #3 at approximately (X-1975,Y-2200). This cluster should be installed in the same manner as those described above.

If you have any further questions concerning these proposals, please contact me as soon as possible.

Attachment

cc: T. Laird



- -- SOIL BORING
- -- TRESTLE PAD
- ▲ -- PROPOSED WELL(S)

⊖ -- FOUNDRY-TYPE SANDS

⊘ -- SLUDGES

SITE #3

